

TWO NEW SPECIES OF *LEPIDAPLOA* (VERNONIEAE: ASTERACEAE)

H. Robinson

Department of Botany, National Museum of Natural History, Smithsonian Institution,
Washington, D.C. 20560-0166 U.S.A.

ABSTRACT

Lepidaploa amambaia from Brazil and Paraguay, and *L. chinchipensis* from Ecuador are described as new.

KEY WORDS: Asteraceae, Vernonieae, *Lepidaploa*, new species

Material received for identification has led to the recognition of two additional undescribed species of *Lepidaploa*.

Lepidaploa amambaia H. Robinson, *spec. nov.* TYPE: BRAZIL. Mato Grosso do Sul: Rod. MT 642, "20 km L de Amambai" (O?), campo cerrado, 16 Dec 1983, *Hatschbach & Calejas 47289* (HOLOTYPE: MBM; Isotypes: US[2]). PARATYPES: BRAZIL. Goiás: Municipio Jataí, Queixada, campestre, 10 Dec 1948, *Macedo 1459* (US). PARAGUAY: Departamento Amambay, Parque Nacional Cerro Corá, 7 Jan 1988, *Soria & Zardini 1966* (MO, frag. US). Departamento Caaguazu, Arroyo Cambay, northern side, 25° 25' S 55° 55' W, cerrado scrub, 12 Jan 1991, *Zardini & Velázquez 25990* (AS,MO,US).

Plantae herbaceae 0.7-1.0 m altae paucè ramosae; caules brunnescentes leniter costati irregulariter puberuli et longe pilosi. Folia alterna, petiolis nullis; laminae oblongae vel leniter oblanceolatae membranaceae plerumque 3.5-6.5 cm longae et 1-2 cm latae margine serrulatae vel denticulatae apice obtusae et argute apiculatae supra dense pilosae subtus subsericeo-pilosae, nervis secundariis utrinque ca. 6 ascendenter leniter arcuatis. Inflorescentiae in ramis erectis subrectis remote seriato-cymosae, bracteolis minutis apiculatis. Capitula sessilia late infundibularia 8-10 mm alta; bractee involucri in marginem et costam flavae; bractee exteriores ca. 30 erecto-patentes anguste subulatae 2-7 mm longae base 0.3-0.8 mm latae valde costatae rigidae apice pungentes extus dense asperulae; bractee interiores ca. 12, oblongo-lanceolatae, ca. 8 mm longae et 1 mm latae, apice breviter acutae et acuminatae

leniter costatae extus asperulae. Flores ca. 12 in capitulo omnino disciformes; corollae lilacinae, ca. 8 mm longae, plerumque glabrae, tubis ca. 4 mm longis superne infundibularibus, faucibus ca. 1 mm longis, lobis ca. 3 mm longis apice dense spiculiferae; thecae antherarum ca. 2.5 mm longae, appendicibus apicalibus ca. 0.3 mm longis. Cypselae ca. 2.5 mm longae sericeo-setuliferae idioblastiferae, idioblastis numerosis in seriebus brevibus, raphidis elongatis; setae pappi albae ca. 7 mm longae apice non lateriores, squamae exteriores lineares ad 1.3 mm longae. Grana pollinis in diametro ca. 40 μ m typi G.

Lepidaploa amambaia has been previously identified as *Vernonia oxylepis* Sch.-Bip. ex Baker (= *Lepidaploa psilostachya* (DC.) H. Rob., and *Lepidaploa cuiabensis* (Baker) H. Rob. (which has larger heads and more reflexed bracts). However, specimens have most commonly been determined as *Lepidaploa remotiflora* (L.C. Rich.) H. Rob. to which the new species seems to be truly closely related. The related *L. remotiflora* differs most obviously by the smaller size of the heads with more slender spreading outer involucre bracts. The inner involucre bracts are more purplish and have numerous long hairs. The corolla lobes of *L. remotiflora* usually have hairless glanduliferous tips, but some specimens have long hairs. None have been seen with densely scabridulous tips as in *L. amambaia*. A search of *L. remotiflora* specimens has revealed other misidentifications, some inexplicable, such as *L. reflexa* (Gardn.) H. Rob., in the group with type D pollen, and *L. towarensis* (Gleason) H. Rob., which has *Aynia*-type pollen. The widespread *L. remotiflora*, minus the misidentified material and minus *L. amambaia*, seems comparatively uniform in overall appearance.

Lepidaploa amambaia is distributed mostly along the border area between eastern Paraguay and adjacent south-central Brazil in campo cerrado or cerrado scrub.

Lepidaploa chinchipensis H. Robinson, *spec. nov.* TYPE: ECUADOR. Zamora-Chinchi: Chinchipe. Parque Nacional Podocarpus, La Esmeralda (cooperativa San Francisco de Numbala Alto), bosque primario "achaparrado" con dosel de 6 m de altura en cresta de colina, 4° 22' S 79° 03' W, 2300 m, Jan 1995, Palacios & Tirado 13064 (HOLOTYPE: US; Isotypes: MO, QCNE).

Plantae suffruticosae vel fruticosae scandentes mediocriter ramosae; caules dense sordide appresse puberuli. Folia alterna, petiolis 4-7 mm longis; laminae subcoriaceae ellipticae 6-7 cm longae 1.5-2.5 cm latae base subcutate margine integrae anguste reflexae apice breviter acuminatae supra atro-virides tenuiter appresse pilosulae in nervulis prominentes subtus dense fulvo-sericeae, nervis secundariis utrinque ca. 6 ascendenter arcuate patentibus. Inflorescentiae thyrsoidae, bracteis primariis foliiformibus 4-6 cm longis, ramis leniter arcuatis, internodiis plerumque 0.5-1.5 cm longis, bracteolis plerumque minutis vel subnullis. Capitula in nodis solitaria vel bina sessilia vel subsessilia campanulata 8-9 mm alta et 5-7 mm lata; bractee involucri ca. 30, ca. 4 seriatas, 2-5 mm longae, exteriores lanceolatae, interiores anguste oblongo-lanceolatae, omnino extus dense lanulatae. Flores ca. 15 in capitulo omnino disciformes; corollae violaceae 4.5-5.8 mm longae plerumque glabrae, tubis 2.0-2.7 mm longis, faucibus ca. 0.5 mm longis, lobis ca. 1.8 mm longis distaliter dense spiculiferis et minute glanduliferis; thecae antherarum ca. 1.5

mm longae, appendicibus apicalibus ovatae ca. 0.4 mm longis; basi stylosum annulate nodiferi. Cypselae immaturae ca. 1.5 mm longae, dense sericeo-setiferae, dense idioblastiferae parce glanduliferae, raphidis elongatis; setae pappi sordidae ca. 4 mm longae apice vix vel non latiores; squamae exteriores ellipticae vel oblongae ca. 1 mm longae. Grana pollinis in diametro ca. 45 μm typi G.

Lepidaploa chinchipensis is known only from the type specimen collected in primary forest in southern Ecuador. The species is most closely related to the similarly scandent, thick-leaved *L. davidsmithii* H. Rob. from San Martín, Perú (Robinson 1995). The latter species is immediately distinguished by the spreading velutinous pubescence of the stems and the dense, erect, sinuous hairs of the leaf undersurface. The Peruvian species is also rather distinctive in the more scorpioid branch tips, the more regular oblong bracteoles of the branches, the thinner pubescence of the inner involucre bracts, the white pappus and the type C pollen. The new species is notable for the particularly densely sericeous fulvous pubescence of the leaf undersurfaces. The plant is described on the label as an "Arbusto escandente."

LITERATURE CITED

- Robinson, H. 1995. New combinations and new species in American Vernoniae (Asteraceae). *Phytologia* 78:384-399.